



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,900	09/12/2003	Wendy-Ann Coyle	GB9-2002-0053US1 (380)	6978

7590 04/23/2007
AKERMAN SENTERFITT
P.O. Box 3188
West Palm Beach, FL 33402-3188

EXAMINER

LERNER, MARTIN

ART UNIT	PAPER NUMBER
----------	--------------

2626

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/660,900

Applicant(s)

COYLE ET AL.

Examiner

Martin Lerner

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 to 9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 to 4 and 6 to 9 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to because of the following informalities:

Figures 1 and 2 have shading, which makes it difficult to read the elements, and has uneven reproduction characteristics. Applicants should submit new Figures 1 and 2, without the shaded elements.

In Figure 4, Step 414, "ration" should be ~~ratio~~.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office Action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the

Art Unit: 2626

changes, Applicants will be notified and informed of any required corrective action in the next Office Action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

Trademarks are disclosed throughout the Specification. Applicants have denoted trademarks by the symbol “*”, but TM or [®] are the correct symbols for trademarks.

Applicants should change the symbol “*” to the trademark symbols TM or [®] throughout the Specification. See MPEP 608.01(v).

On page 5, ¶[0026], voice server 116 is not clearly shown in Figure 1.

On page 5, ¶[0026], VoiceXML application layer 112 is not clearly shown in Figure 1.

On page 10, ¶[0042], “first words” should be –first word--.

On page 11, ¶[0045], “WebSphere voice Response” should be –WebSphere Voice Response—.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

Art Unit: 2626

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 to 4 and 7 to 9 are rejected under 35 U.S.C. 102(e) as being anticipated by *Thelen et al.*

Regarding independent claims 1, 8, and 9, *Thelen et al.* discloses a method, system, and computer program product for speech velocity adaptation, comprising:

“means for acquiring an utterance from a user” – speech utterances produced by a user or speaker are fed to a microphone 6, and the analog speech data is applied to input unit 5, which performs a digitization of the speech data (column 2, lines 63 to 67: Figure 1);

“means for recognizing a plurality of words from the utterance” – the digital speech data are then applied to the speech recognizer 1; a speech recognition process is carried out, supplying recognized phonemes or words (column 2, line 67 to column 3, line 5: Figure 1);

“means for comparing the actual duration of the utterance to an ideal duration of the recognized words” – by means of the recognized phonemes and/or words, the speech velocity is determined in the measuring unit 2 (column 2, lines 2 to 5: Figure 1); speech velocity is displayed relative to an average speech velocity of an acoustic model (column 2, lines 46 to 50); an acoustic model is available to speech recognizer 1 for the recognition result to be generated; this acoustic model is based on the average speech velocity; the average speech velocity is compared with the measured speech velocity in speech recognizer 1 (column 3, lines 12 to 25: Figure 1); an acoustic model supplies

“an ideal duration” of speech duration, or velocity, and a measured speech velocity represents “the actual duration of the utterance”, as velocity is inversely proportional to duration;

“means for prompting the user as to the speed of delivery of the utterance according to the results of the comparison” – a user is informed of the user’s speech velocity via output means 3; output means are, for example, LEDs for which a respective color (green) shows an acceptable speech velocity and another color (red) shows an unacceptable deviation; another possibility is the display of a number value by which the user is informed of the range in which the number value is to lie; with an exclusively audio-based communication, the user is informed by means of a warning signal that the speech velocity lies outside an acceptable range (column 1, line 66 to column 2, line 11); informing a user of speech velocity via LEDs, a numerical display, or an audio warning signal are within a range of equivalents of “means for prompting”.

Regarding claim 2, *Thelen et al.* discloses that an actual duration is obtained from an acoustic model for each phoneme or word as a time unit, and an ideal duration is obtained for each word of a measured speech velocity of recognized words from measuring unit 2; then, results are compared for each word, and an announcement as to whether the speech velocity lies in an acceptable range may be linked with a transgression of an experimentally determined threshold value (column 2, lines 29 to 40; column 3, lines 12 to 25; Figure 1).

Regarding claim 3, *Thelen et al.* discloses comparing a measured value of speech velocity to an average value of speech velocity from an acoustic model (column 3, lines 12 to 20); implicitly, a comparison of two values is a "ratio".

Regarding claim 4, *Thelen et al.* discloses measuring speech velocity by counting the number phonemes per frame unit or words per second (column 2, lines 29 to 33; column 3, lines 20 to 25); then, speech velocity is displayed relative to an average speech velocity of an acoustic model (column 2, lines 46 to 49); thus, an average speech velocity is calculated over a number of words, instead of simply over one word.

Regarding claim 7, *Thelen et al.* discloses that the announcement of whether the speech velocity lies in an acceptable range is linked with a transgression of an experimentally determined threshold value; consequently, the user is then only informed when the speech velocity is too high, so that he is not distracted by the information – speech velocity lies in an acceptable range (column 2, lines 34 to 39); thus, an announcement is made as to a speech velocity being outside of the range only if a threshold is exceeded, where a threshold sets a level of "a de minimus value", so that exceeding a threshold corresponds to "the actual duration and the ideal duration differ by more than a de minimus value."

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Thelen et al.* in view of *Ladd et al.*

Thelen et al. discloses an exclusively audio-based communication to the user by means of a warning signal (column 2, lines 8 to 11), and suggests that the speech recognizer is informed as to whether the speech velocity is too high, or whether the speech velocity is too low (column 2, lines 14 to 22). Additionally, a user is informed by a number value as to a range (column 2, lines 6 to 8), where a number value may communicate either a too high value or a too low value, implicitly. However, *Thelen et al.* does not clearly say that the user is prompted that the utterance has been delivered too slow or if it is delivered too fast. Still, it is well known to provide spoken prompts to a user for interactive voice response (IVR) systems. *Ladd et al.* teaches voice interactive services, where a voice browser collects an input from a user, and determines whether there is an error. If the voice browser detected too much speech from the user or the recognition is too slow, a prompt is played (i.e., "Sorry, I didn't understand you") to the user via a server. (Too much speech or slow recognition corresponds to speaking too fast.) The objective is to play an appropriate error message to a user if the voice browser is having difficulty recognizing inputs from the user. (Column 14, Lines 50 to 58) It would have been obvious to one having ordinary skill in the art to provide voice prompts as taught by *Ladd et al.* to inform a user that he/she is speaking too fast or too slow as suggested by *Thelen et al.* for a purpose of playing an appropriate error message if a voice browser is having difficulty recognizing inputs from a user.

Allowable Subject Matter

7. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to Applicants' disclosure.

Bauer, Bartosik, Oliver et al., Rudd et al., and Sakurai et al. disclose related art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin Lerner whose telephone number is (571) 272-7608. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Thursday.

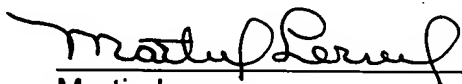
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2626

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ML
4/12/07



Martin Lerner
Examiner
Group Art Unit 2626